

Application No: 10/801,349
Amendment dated July 13, 2006
Reply to Office Action Dated April 13, 2006

Attorney Docket No: 3926.076

IN THE SPECIFICATION:

Please replace paragraph [00032] with the following paragraph:

[00032] The cooling element 5 is formed from copper coated with a chromium layer. The chromium plating results in a mirrored surface which particularly well prevents undesirable absorption of the reflected light and thus largely reduces any possible adverse affect on the light yield resulting from the cooling element. The use of copper ensures that the heat which is produced by the semiconductor light source 4 during operation is transferred very quickly and efficiently to the cooling element 5, is passed through the transparent lens, and is emitted to the surrounding area. The fact that the cooling element 5 passes through the transparent lens 3 and projects beyond the lens 3 ensures that the wind of motion to which the headlight according to the invention is subject during operation of the vehicle leads to significant cooling of that part of the cooling element 5 which projects beyond the lens 3, thus ensuring that the heat from the light source 4 is dissipated via the cooling element 5, which is in the form of a rod, and is emitted to the surrounding area. This ensures that the light source 4 is kept in a temperature range which leads to no significant damage to the light source 4. It is thus largely possible to prevent overheating of the semiconductor light source 4, for example by reaching a temperature of 150°C, and this on the one hand has a highly positive effect on the efficiency of the semiconductor light source 4 while, on the other hand, it influences the life of the semiconductor light source 4. Optionally, a flat heat sink 6, in particular in the form of a disc, can be arranged on the side of the lens 3 which faces away from the light source 4 and is thermally connected to the cooling element 5. Also, the light source may represent an array 7 including two or more individual light sources, which is arranged on a mount and whose mount is thermally conductively connected to the cooling element .